Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (CURRENTLY AMENDED)   A method for processing video pictures, useful for large area flicker effect reduction, the video pictures comprising pixels having assigned one or more pixel value representing luminance or colour component of the pixel, the pixel values being digitally coded into digital code words, the digital code word determining the length of the time period during which the corresponding element of a display is activated, wherein to each bit of the digital code word a certain activation duration is assigned, defining a sub-field, the sum of the durations of the sub-fields according to a given code word determining the length of the time period during which a corresponding display element is activated, said method comprising the steps of:

organizing the sub-fields for a frame period being characterized by the reciprocal value of the frame repetition rate in two consecutive groups, and

adjusting the starting times of the two sub-field groups to a time raster corresponding to a doubling of the frame repetition rate by adding a first blanking period of a first dedicated length behind the last sub-field of the first sub-field group and a second blanking period of a second dedicated length behind the last sub-field of the second sub-field group,

wherein, the first and second blanking periods are distinct from the addressing and erasing periods of a sub-field.

2. (ORIGINAL)   Method according to claim 1, wherein in a sub-field coding process to a pixel value a code word is assigned which distributes the active sub-field periods equally over the two sub-field groups.

3. (ORIGINAL)   Method according to claim 1, wherein during the first and second blanking period no addressing in a sub-field takes place so that no light is emitted.

4. (ORIGINAL)   Method according to claim 1, wherein the first and second blanking

periods are longer than a sub-field with the least significant weight inclusive addressing and erasing period.

5. (CURRENTLY AMENDED)   Apparatus for processing video pictures, useful for large area flicker effect reduction, the video pictures comprising pixels having assigned one or more pixel value representing luminance or colour component of a pixel, the pixel values being digitally coded into digital code words, the digital code word determining the length of the time period during which the corresponding element of a display is activated, wherein to each bit of the digital code word a certain activation duration is assigned, defining a sub-field, the sum of the duration of the sub-fields according to a given code word determining the length of the time period during which a corresponding display element is activated, the apparatus comprising,

sub-field organization means for positioning two sub-field groups in a frame period being characterized by the reciprocal value of the frame repetition rate, according to a time raster that corresponds to the doubling of the frame repetition rate,

the sub-field organization means further including blanking interval inserting means that insert a first blanking period of a first dedicated length behind the last sub-field of the first sub-field group and a second blanking period of a second dedicated length behind the last sub-field of the second sub-field group for adjusting the starting times of the two sub-field groups to a time raster corresponding to a doubling of the frame repetition rate, wherein the first and second blanking periods are distinct from the addressing and erasing periods of a sub-field.

6. (ORIGINAL)   Apparatus according to claim 5, wherein the blanking interval inserting means suppress any addressing operation in a sub-field so that no light is emitted during the first and second blanking period.

7. (ORIGINAL)   Apparatus according to claim 5, wherein the blanking interval inserting means provide for inserting a first and second blanking periods that are longer than a sub-field with the least significant weight inclusive addressing and erasing period.

8. (ORIGINAL)   Apparatus according to claim 6, further comprising a matrix display.

9. (ORIGINAL)   Apparatus according to claim 8, wherein the matrix display is a plasma display.

10. (ORIGINAL)   Apparatus according to claim 8, wherein the matrix display is a DMD display.

11. (ALLOWED)   A method for coding of pixel values for a video picture, the video pictures comprising pixels having assigned one or more pixel value representing luminance/colour component of the pixel, the digital code word determining the length of the time period during which the corresponding pixel/pixel component of a display is activated, wherein to each bit of the digital code word a certain activation duration is assigned, defining a sub-field, the sum of the durations of the sub-fields according to a code word determining the length of the time period during which the corresponding pixel/pixel component is activated in a frame period, wherein in the sub-field coding process to a pixel value a digital code word is assigned which distributes the active sub-field periods equally over two sub-field groups, wherein the two sub-field groups are dedicated to be positioned in the frame period according to a time raster that corresponds to the doubling of the frame repetition rate, said method comprising the steps of:

    dividing a pixel value into three components;

    individually coding each of the three components;

    the first component is coded with a number of lower significant sub-fields of both sub-field groups;

    the second component is coded with the higher significant sub-fields of the first group; and

    the third component is coded with the higher significant sub-fields of the second group.

12. (ALLOWED)   Apparatus for processing video pictures, useful for large area flicker

effect reduction, the video pictures comprising pixels having assigned one or more pixel value representing luminance of a pixel, the pixel values being digitally coded into digital code words, the digital code word determining the length of the time period during which the corresponding pixel of a display is activated, wherein to each bit of the digital code word a certain activation duration is assigned, defining a sub-field, the sum of the duration of the sub-fields according to a given code word determining the length of the time period during which the corresponding pixel is activated, the apparatus comprising,

sub-field organization means for positioning two sub-field groups in a frame period being characterized by the reciprocal value of the frame repetition rate, according to a time raster that corresponds to the doubling of the frame repetition rate, sub-field coding means for assigning to a pixel value a code word which distributes the active sub-field periods equally over the two sub-field groups, wherein the sub-field coding means comprise a code table in which for the possible pixel values or pixel component values the corresponding code word is stored that was coded with the steps of:

dividing a pixel value into three components;

individually coding each of the three components;

the first component is coded with a number of lower significant sub-fields of both sub-field groups;

the second component is coded with the higher significant sub-fields of the first group; and

the third component is coded with the higher significant sub-fields of the second group.

13. (ALLOWED)   The apparatus according to claim 12, further comprising a matrix display.

14. (ALLOWED)   The apparatus according to claim 13, wherein the matrix display is a plasma display.

15. (ALLOWED)   The apparatus according to claim 13, wherein the matrix display is a DMD display.